

Notice of Allowability	Application No.	Applicant(s)	
	09/675,194	ZIMMERMAN, GARY D.	
	Examiner	Art Unit	
	Thierry L. Pham	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to authorized examiner's amendment dated 4/24/07.
2. ☒ The allowed claim(s) is/are claims 12-14, 30-33, 36-37, and 39 are allowed; renumbered as claims 1-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

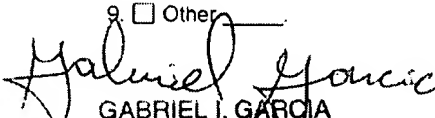
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


GABRIEL I. GARCIA
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Amir Penn on 4/24/07.

Please amend the following claims:

1-10. (Canceled).

12. (Currently Amended) The single continuous cable of claim ~~[[10]]~~30 wherein the printer controller program, when executing on ~~[[the]]~~ a processor, receives the print controller ready data and based thereon generates the print engine ready data for controlling a print engine.

13. (Currently Amended) The single continuous cable of claim ~~[[9]]~~30 further comprising: an integrity check module, when executing on the processor, for performing an integrity check on the printer controller program to determine whether the printer controller program is corrupted and re-installing the printer controller program when the printer controller program is corrupted.

14. (Currently Amended) The single continuous cable of claim ~~[[9]]~~30 wherein the printer controller is embodied in one of a single integrated circuit and an application specific integrated circuit (ASIC).

21-29. (Canceled)

30. (Currently Amended) A single continuous cable comprising:
a first connector having a print controller ready data interface for receiving print controller ready data;

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a second connector having a print engine ready data interface for providing print engine ready data; and

a printer controller disposed entirely within the single continuous cable, the printer controller connected to the first connector and the second connector internal to the cable, the printer controller configured to receive the print controller ready data from the print controller ready data interface and to generate print engine ready data for transmission to the print engine ready data interface; and

a dynamic loading program for automatically managing download of the printer controller program from a host computer to a memory consisting of volatile memory, and wherein the dynamic loading program determines whether a current version of the printer controller program resident in the volatile memory is valid or not, and automatically downloads an updated version of the printer controller program from the host computer to the volatile memory of the printer controller if the current version of the printer controller program is not valid.

38. (Canceled).

40-42. (Canceled).

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DETAILED ACTION

- This action is responsive to the following communication: Authorized examiner's amendment dated 4/24/07.
- Claims 11, 15-20, 34-35 (previously canceled); claims 1-10, 21-29, 38, 40-42 (canceled via examiner's amendment); claims 12-14, 30-33, 36-37, and 39 (allowed via examiner's amendment); claim 30 is here amended to include allowable subject matter.

Allowable Subject Matter

- Claims 12-14, 30-33, 36-37, and 39 are allowed; renumbered as claims 1-10.
- The following is an examiner's statement of reasons for allowance: The cited prior arts (US 6587140 to Young No; US 5989051 to Zelno et al) of record teach a PC card having a printer controller disposed entirely within, but the cited prior arts of record fail to teach and/or suggest wherein a printer controller is disposed entirely within the single continuous cable, and wherein the continuous cable is having a dynamic loading program for automatically managing download of the printer controller program from a host computer to a memory consisting of volatile memory, and wherein the dynamic loading program determines whether a current version of the printer controller program resident in the volatile memory is valid or not, and automatically downloads an updated version of the printer controller program from the host computer to the volatile memory of the printer controller if the current version of the printer controller program is not valid and in combinations of other features as cited in independent claim 30 (renumbered as claim 1, see examiner's amendment for details). The examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of prior arts that teaches the above limitations and in combinations of other features cited in claim 30 (renumbered as claim 1).

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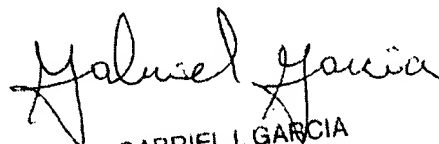
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thierry L. Pham


GABRIEL I. GARCIA
PRIMARY EXAMINER